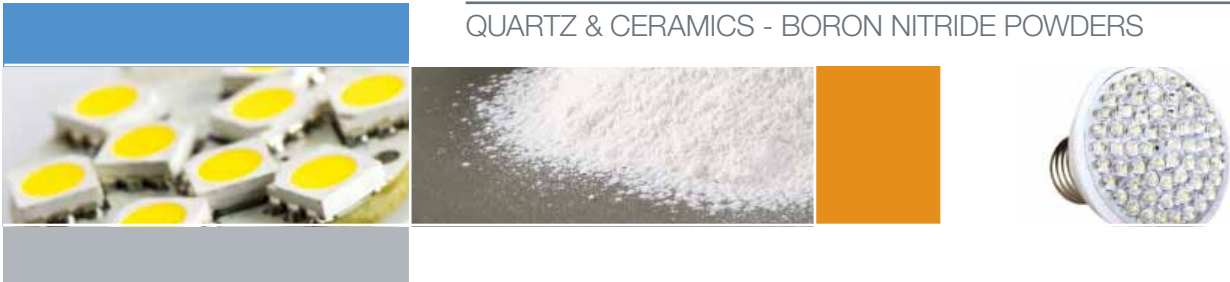


PolarTherm* PT110A Boron Nitride Powder

QUARTZ & CERAMICS - BORON NITRIDE POWDERS



PolarTherm PT110A boron nitride (BN) powder is a highly crystalline, high-purity single-crystal grade with a very low surface area. This combination of features makes PT110A an outstanding filler that may improve the thermal conductivity of polymer resins, as it can be loaded to high levels and still provide good flow performance. PT110A improves on PolarTherm BN filler PT110 by offering a tighter particle size distribution and a smaller D90. It performs best when processing techniques that promote favorable alignment of the platelets in the direction of desired heat flow are applied. As a filler, PT110A offers benefits to a variety of electronics applications.

Potential Applications

- Phase change thermal interface materials
- Thermal interface tapes, films and pads
- Thermal greases, gels and adhesives
- Potting and encapsulants
- Additive for thermally conductive plastics

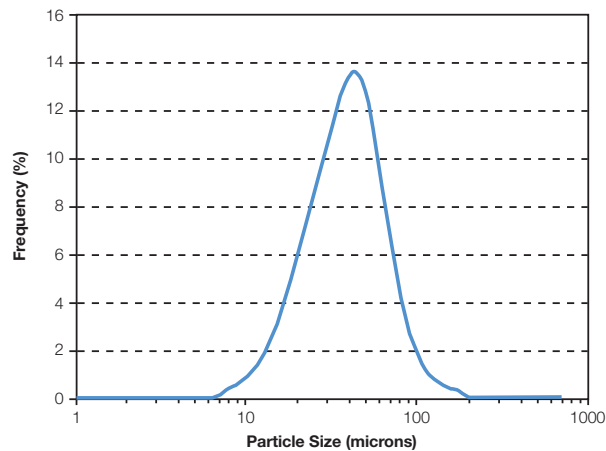
Key Features and Typical Benefits

- Thermal conductor
- Electrical insulator
- Low dielectric constant/loss
- High temperature stability
- Lubricious
- Relatively inert and chemically stable
- Non-wetting

Typical Physical Properties⁽¹⁾

Structure	Single-crystal platelet
Mean particle size (µm)	40
D10/D90 (µm)	20/70
Surface area (m ² /g)	0.7
Oxygen (wt%)	0.3
Carbon (wt%)	0.03
Soluble borates (wt%)	0.05

Typical Particle Size Distribution⁽¹⁾



Scanning Electron Microscope Image of PolarTherm PT110A



(1) Typical properties are average data and are not to be used as or to develop specifications.

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